

CCC"TCGACCTCGAGATCCATTGTGCTCTAAAGCAGAGTCTGGGTCTTACC"TAGATATGGCACCCGAGGATA
 CCTAGAGGCCCCCATGCAAGAGAAAGGCCCTTGTTTCCAGGCAC"TGAGGACCGCAGTCCCTAATTCCTGGG"
 AGTTCCTGAGATCTCAAGGAAAGCAGGGTCAGCCGAGGAGGCC"TGCGGAGAGGAGGCATCC"TAGACCCAAAT
 CTTGGGCC"TGCTGGCTAAAGGGAACAGGAGACCATGACAGCTATGC"
 TAAACATTAGAAACCATGGCCAGTGAAGAAAGAAATATGGGCCGAGGAAAC"TGTTGGTGTGTGTGGAGACCCGGGC"
 CACAGGCTATCATTTCCACGCCCTTGACTTGTGAGGGCTGCAAGGGCTTCTTAGACAGAAACAGTCAAGCAAA
 ACCATTGGTCCCATCTGTCCGTTTGTCTGGAAGGTGTGAGGTACGCAAGGCCCAGAGACGCCACTGTCTCAG
 CCTGCAGGTTGCAGAAAGTGTCTAAATGTTGGCATGAGGAAGAGCAATGATACGTCTACGAGAAAGCCCTGGC"
 ATTGCCGGGAGCCAGACAGGCACAGCGGCCGGGCAGAGAAAGCATCTTTGCAAC"TGAAATCAGCAGCAGAAAA
 GAAC"TGGLTCCAGATCC"TCCTGGGGGCCACACTCGCCATGTGGGCCCATTTGTTGACCCAGTTTGTGTGCAGT
 TCAAGCTCCAGCC"ATCTGTGTTTCATGCATCACCGGCTTTCCAGCCTCGGGGCCCTCGTGTGCTCTGCT
 CACACACTTTGCAGATATCAACACAGTTTATGGTGCAAACAGATCATCAAGTTACCAAGGATCTGCCCCCTC
 TCCCGGTCCTTAACCATGAGGAGCACAGATCTCCCTTCTCAAGGGAGCGCGTGTGGAAAAATATTGCATATCT
 CACTCAACACTACGTTCTGTCTTCAACACAGAGAAATTTCTTGTGGGGCTCTTTTGTCTACAAAGATGGAGGA
 CGCAGTCCATGCAGGGTTCCAGTACAGATTTTTGGAGTCTGATCTCCACTTCCATATAAAACCTTGAAAGGA
 CTGCATCTCCAGGAGCCTGAGTATGTGCTCATGGCTGCCACGGCCCTTTCTCCCTTGGTTTCTGTATGC
 AAAGCTGATGGGCTGTGGCTGACCTCCGGAGTATAAACAAATGCATACCTCTATGAACTTACAGCGCTTG
 GAGGAAC"TGTTCTGTATGACCGCCGCTGTCTGGGGAGATTTCAGTTGAGGCCCAGGC"TTGCATCTTTCC
 CCAGACCCCAAGGGATACACTGGCCTGGAAAGGGTACAGCGCTGGACCCCAACACAGCAGCAAGAGGCTTGG
 GAGTGGCAANTGAATGCTGAACAGT" (SEQ ID NO:1)

MTAMLTLETMASEEEYGPRNCVCGDRATGYHIFHALTCEGCKGF
 FRRTVSKTIGPICPFAGRCEVSKAQRRIHCPACRLQKCLNVGMRKDM
 ILSAEALALRRARQAQRRAEKASLQNLNQCKELVQILLGAHTRHVG
 PLFDQFVQFKPPAYLFMHIRPFQPRGPVLPLLTHFADINTFMVQQHK
 FTKDLPLFRSLTMEDQISLLKGAAVEILHISLNTTFCLQNTENFFCGPLC
 YKMEDAVHIAGFQYEFLESILHIFHKNLKLGLHLEPEYVLMMAATA
 LFSPGFCMQS (SEQ ID NO:2)

FIG. 1

Construct

GI Number(s): 2267577

Gene Family: Nuclear Hormone Receptor

Gene
Subfamily: Orphan NHR

Gene Sequence: full-length cDNA, Mouse

underlined = deleted in targeting construct

[] = sequence flanking Neo insert in targeting construct

```
CCCTCGACCTCGAGATCCATTGTGCTCTAAAGCAGAGTCTGGGTCCTACCTACATATGGC
ACCGAGGATACCTAGAGGCCCATGCAAGAGAAGGCCCTTGTTTCCAGGCACTGAGGAC
CGCAGTCCCTAATTCCTGGCAGTTCCCTGAGATCTCAAGGAAAGCAGGGTCAGCGAGGAGG
CCTGGGGAGAGGAGGCATCCTACACCCCAATCTTGTGGCCTGCTGCTTAAGGAAACAGGA
GACCATGACAGCTATGCTAACACTAGAACCATCCTCCAGTCAAGAGATATGGGCGGAG
GAAGTGTGTGTGTGTGTGGAGACGGGGCCACAGGCTATCATTTCCAGAGCCCTTGTGA
GGGCTGCAAGGGGCTTCCAGAGGAGAGTCCAGGAAAGCCATTGGTCCATTTGTCCCTT
TCTCTGAGGCTGTGAGTTCAGGAAAGGCTCCAGAGAGGCCACTGTCCAGCTTGCAGGTTGCA
GAAATGTCTAAATGTTGGCATGAGGAAAGACATGATACTGTCAGCAGAAGCCCTGGCATT
GCGGCGAGCCAGACAGGCAAGCGGGGGGCGAGAGAAAGCATCTTGCAGTGAATCAGCA
GCAGAAAGAACTGGTCCAGATCCTCCTGGGGGGCCACACTCGGCATGTGGGCCCCATTGTT
TGACCACTTTGTGAGTTCAGGCTCCTCAGCCTATCTGTTTCATGCATCACCGGCTTTCCA
GCCTCGGGGGCCCCGTGTTGCTCTGTCTCACACACTTTGCAGATATCAACAGCTTTATGGT
GCAACAGATCATCAAGTTCAACCAAGGATCTGCCGCTCTTCCGCTCCCTAACCATGGAGGA
CCAGATCTCCCTTCTCAAGGGAGCGGCTGTGGAAATATTGCATATCTCACTCAACACTAC
GTTCTGTCTTCAACAGAGAATTTCTTCTGTGGGCTCTTTGCTACAAGATGGAGGAGGC
AGTCCATGCAGGGTTCCAGTACGAGTTTTTGGAGTCGATCCTCCACTTCCATAAAAACT
GAAAGGACTGCATCTCCAGGAGCCTGAGTATGTGCTCATGGCTGCCACGGCCCTCTTCTC
CCCTGCTTTCTGTATGCAAGCTGATGGGCTGCTGGCTGACCTCCGGAGTATAAACAAT
CCATACTCCTATGAAGTTCAGGCTTGGAGGAAGTGTCTGCTATGACGCGGCTGCTCGGG
GAGATTTGCAGTTGAGGCCAGGCTTGCATCCTTTCCCCAGACCCCAAGGATACACTGG
CCTGGAAAGGGTACAGCGCTGGACCCACACAGCAGAAGGAGCTTGGGAGTGGAATGAA
ATGCTGAACAGT
```

Gene Sequence
Structure *

282 bp

Sequence Deleted

403 bp

Size of full-length
cDNA: 1332 bp

FIG. 2A

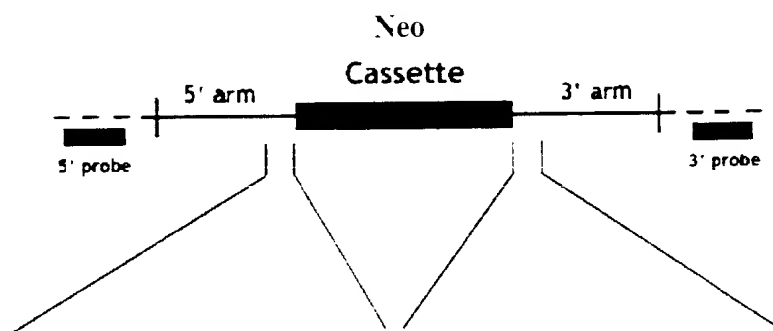
Targeting Vector* (genomic sequence)

Construct Number: 138

Arm Length:

5': 3.5 kb

3': 1.9 kb



————— Targeting Vector
 - - - - - Endogenous Locus

* Not drawn to scale

5' > TTGGAGGDCAGAGACAAAAAG
 CAACATTTTTCCTTTTAATGTCT
 CAGTGCTGGGGAGCCCGGTGTGAG
 GCTGGGCACTTTTGGGAAGAGATT
 CTGTAGAGGAGAGAGAAGAGATC
 CTATGGGCCAGTGTCTATTCTCAA
 CTCTCTCCACATTCAGGAGACCAT
 GAGAGCTATGTAAACA:TAGAAAC
 CATGGCCAGTG<3'

(SEQ ID NO. 3)

5' > GGTCCCATCTGTCCGTTTGT
 GGAAGGTGTGAGGTGAGCAAGGCC
 CAGAGAGCCCACTGTCCAGCCTGC
 AGGTTTCCAGAAAGTGTCTAAATGTT
 GGCATGAGGAAAGACAGTCAATTG
 GTCCCTACCGTTCCAGGAGTCCAT
 TGGTGTCTCTGTGTTTTTGTTCAG
 GTTCCACAGCAGGCAGAGTGAAG
 TGTGGAACCC<3'

(SEQ ID NO. 4)

FIG. 2B

necropsy - spleen weight/body weight

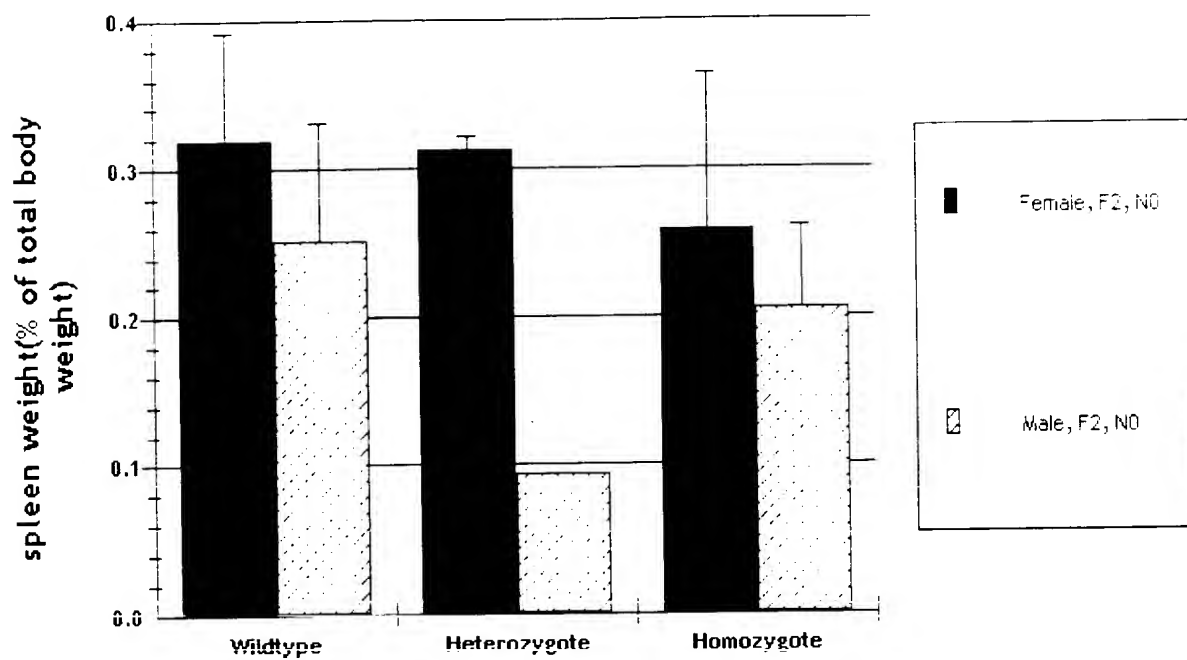


FIG. 3

necropsy - thymus weight/body weight

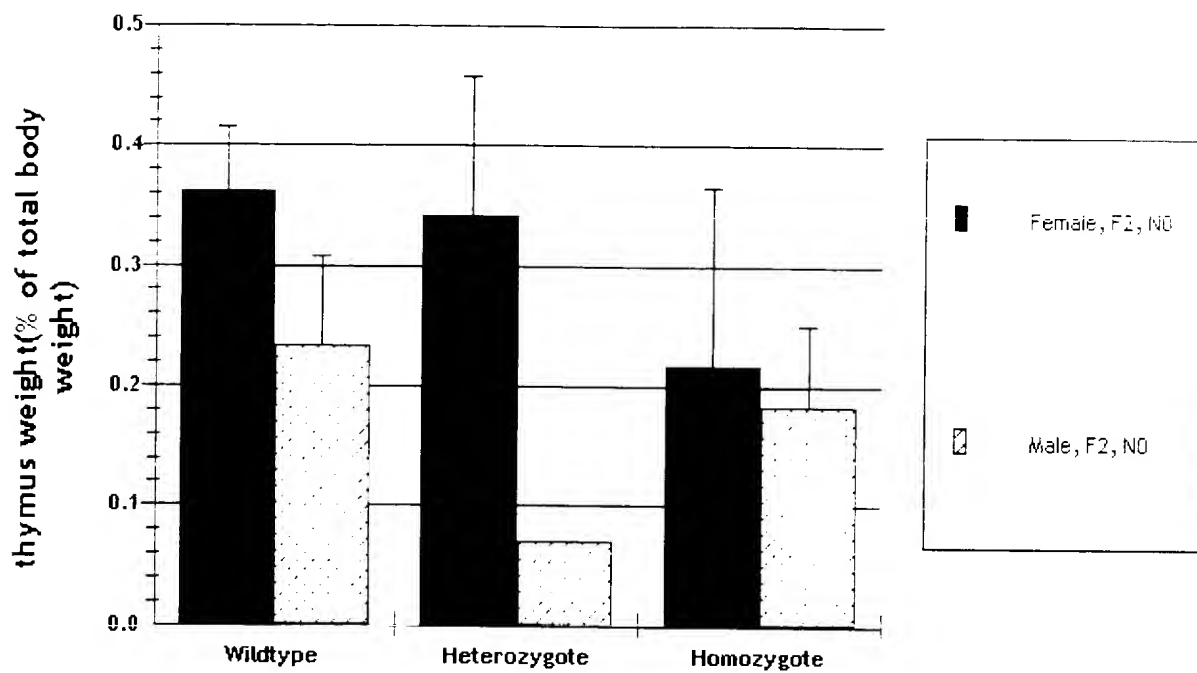


FIG. 4